

CLAIMS

1. A bevel gear transmission, without a shims, especially for a controlled wheel of a service vehicle, notably a vehicle similar to a lift truck, having a one-piece housing for the confining of a bevel gearset, a crown gear, a plurality of bearing borings for bearings to support a bevel pinion gear shaft, a UniPack bearing and a sealing cover, therein characterized in that the sealing cover (2) is assembled at that location at which the vertical bearing borings (3, 4) for the bearings (5, 6) of the pinion gear shaft (7) are to be placed, and in that the said sealing cover (2) possesses a circumferential protrusion (8) which enables a suitably dimensioned tool to be vertically introduced into the said one-piece housing (1) for an exact fit of the precisely dimensioned housing sections (A) and (B) which have close dimensional tolerances.

2. A bevel gear transmission in accord with claim 1, therein characterized, in that the assembly of the dimensioned parts (A) and (B) is carried out in a jig.

3. A bevel gear transmission in accord with claim 1 or 2, therein characterized, in that the width tolerance of the prefabricated UniPack bearing (9) is so limited, that it, along with the installation dimensioning (EBMT) of the crown gear falls within the allowable limitations of the tolerance window thus making the use of a shim redundant.

4. A bevel gear transmission in accord with claim 1, 2 or 3, therein characterized, in that the tolerance window of the circumferential back lash is increased in such a way, that, with consideration given to tolerances in the fabrication of the individual components, the desired overall dimensioning of the assembly is process safe and attainable.